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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 09/657,505      | 11/02/2000  | Knut Beneke          | 4175-0101P          | 3079             |

7590 10/03/2003

BIRCH, STEWART, KOLASCH & BIRCH, LLP  
P.O. Box 747  
Falls Church, VA 22040-0747

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| EXAMINER |
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LU, TOM Y

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| ART UNIT | PAPER NUMBER |
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2621

DATE MAILED: 10/03/2003

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Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/657,505

Applicant(s)

BENEKE, KNUT

Examiner

Tom Y Lu

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-4 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-4 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 02 November 2000 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

### Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## DETAILED ACTION

### *Priority*

1. Acknowledgment is made of applicant's claim for priority under 35 U.S.C. 119(a)-(d) based upon an application filed in Germany on 09/09/1999. A claim for priority under 35 U.S.C. 119(a)-(d) cannot be based on said application, since the United States application was filed more than twelve months thereafter.

### *Claim Rejections - 35 USC § 112*

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2. Claims 1-4 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

- a. With regard to Claim 1, applicant fails to provide a clear explanation about how it is possible to assign different colors to two sub-objects with same absorption attributes. The term, "absorption attribute" is broad. Thickness, density and atomic numbers are all considered as absorption attributes.
- b. Claims 2-4 are rejected as being dependent upon Claim 1.

### *Claim Rejections - 35 USC § 102*

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

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A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-4 are rejected under 35 U.S.C. 102(b) as being anticipated by Annis et al (U.S. Patent No. 5,253,283).

a. Referring to Claim 1, Annis discloses determining an absorption attribute of a plurality of the sub-objects (3,4) (Annis at column 3, lines 3-16, teaches determining the attenuation level, and the scatter level of the object 40, and object 40 contains a plurality of components. Note the attenuation level and scatter level are determined based on the thickness, density, and atomic number of the components as described at column 1, lines 26-32. The thickness, density and atomic number are the claimed “absorption attribute”); assigning a specific color to each of the plurality of sub-objects (3,4) having a same absorption attribute, each specific color being different from each other (the components are categorized based on the atomic numbers even if they have the same thickness, column 3, lines 45-51. And a proper color is assigned to each of the categorized components, column 4, lines 24-33, lines 36-37); adjusting a brightness level of one of the specific colors by adjusting each pixel thereof with a determined color proportion of at least one of red, green or blue, whereby the adjustment of the brightness level takes into consideration the sensitivity of the human eye (Annis at column 5, lines 31-34, teaches the color look-up table is programmed to allocate a brightness value to the particular color for each pixel which is dependent on the intensity of the transmitted or scattered radiation, and such brightness adjustment

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would depict the spatial variations on the color monitor 92, column 5, lines 36-37, which implies the brightness is adjusted to compensate the sensitivity of human eyes); and displaying at least the plurality of sub-objects (3,4) having the same absorption attributes on a monitor, whereby adjustment of the brightness level of one of the specific colors causes the human eye to view at least the plurality of sub-objects (3,4) as having equal brightness levels (column 5, lines 31-36. Note the purpose of compensating the sensitivity of the human eye is to have equal brightness level).

- b. Referring to Claim 2, Annis discloses wherein color proportions (R.G.B) are stored in support tables of a computer (Annis at column 4, line 3, teaches "color look-up table 96").
- c. Referring to Claim 3, Annis discloses wherein the intensity of the specific colors is increased or decreased for the brightness adjustment (column 4, lines 53-56).
- d. Referring to Claim 4, Annis discloses determining one average atomic number of each of the at least the plurality of sub-objects from two different energies (Annis at column 3, lines 43-45, teaches determining the high or low atomic numbers from attenuation and scatter); and assigning the specific colors to the at least plurality of sub-objects based upon their respective average atomic number (column 4, lines 36-37).

### ***Conclusion***

- 4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

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- a. Macovski, U.S. Patent No. 3,848,130, see column 2.
- b. Chalmers, U.S. Patent No. 6,546,072 B1, see column 1.

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tom Y Lu whose telephone number is (703) 306-4057. The examiner can normally be reached on 8:30AM-5PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Leo H Boudreau can be reached on (703) 305-4706. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.

Tom Y. Lu

  
**DANIEL MARIAM**  
**PRIMARY EXAMINER**